

Algorithms of solving the matrix equations for deformation mechanics of flexible structures at finite displacements

Gainutdinova T.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The algorithms of forming the matrix equations of equilibrium in solving geometrically nonlinear problems are described. These algorithms provide the procedure of solution extension with respect to a parameter, accelerate the convergence process, and permit the solution to be obtained by the most efficient way in terms of computational burden. © Allerton Press, Inc., 2011.

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Keywords

Finite displacements, Matrix equilibrium equations, Solution extension with respect to a parameter